

New York Blue Unveiled at BNL

It was standing room only on Friday, June 15, when New York State elected officials and dignitaries from Brookhaven and Stony Brook spoke to an enthusiastic crowd about the new IBM Blue Gene computer recently installed at the Lab.

Named New York Blue, the new machine is the world's fastest supercomputer for general users and is expected to rank among the top ten fastest computers in the world.

Supported by a \$26-million allocation from New York State, New York Blue is the centerpiece of the New York Center for Computational Sciences, a cooperative initiative between Stony Brook and Brookhaven that will foster research collaborations among research institutions, universities and companies throughout New York State.

The Science

High-end computing, which includes supercomputers, data storage, networking, and visualization, is an essential component of scientific research and technology in the twenty-first century. New York Blue is capable of 100 teraflops ("flops" stands for floating point operations per second), which translates to 100 trillion calculations per second — about 10,000 times faster than a personal computer. It will be used to advance science in many areas, notably:

Nuclear and high-energy physics

Provide a significant extension of the computational power for interpreting current data and modeling future experiments at Brookhaven's Relativistic Heavy

Ion Collider, the nation's premiere nuclear physics facility, which promises a better understanding of the fundamental structure and properties of matter and the evolution of the universe.

Astrophysics

Understand the thermonuclear reactions that generate the energy of the sun and the other stars in the universe.

Nanoscale science and technology

Enable the complex calculations required to study the physical and chemical properties of nanoparticles being explored for their potential to increase

U.S. energy independence.

Computational biology and bioinformatics

Allow the creation of interactive models of complex biological systems, including proteins and genomic information, to support the cost-efficient production of renewable biofuels.

Climate science

Supply enhanced computational power for running climate models and models of atmospheric processes needed to improve our understanding of the effects of aerosols and clouds on Earth's future climate.

The Installation

New York Blue sits in the computing facility on the ground floor of Bldg. 515, Information Technology Division.

Over the last several months, a Plant Engineering Division design team worked with Long Island contractors to prepare what was once the 1,700 square-foot "visualization area" in the building for the new machine. The local contractors were:

- civil - Ralph Lettieri Excavating
- electrical - Roppelt Electrical
- architectural - Conroy Contracting
- mechanical - Perfect Plumbing

Temperature and humidity are carefully controlled, a fire detection and suppression system is installed, and the room is protected with card-access controls and other security measures. — Mona S. Rowe



Roger Stoutenburgh D220607

On June 15, Stony Brook University (SBU) and BNL unveiled New York Blue, the IBM Blue Gene supercomputer supported by a \$26 million allocation from New York State (NYS) and located at BNL. At the ceremony are: (from left) James Davenport, Technical Director of the New York Center for Computational Sciences at BNL; Sam Aronson, BNL Director; NYS Assemblyman Marc Alessi; NYS Assemblyman Steven Englebright; NYS Senator Kenneth P. LaValle; Emilio Mendez, BNL's Center for Functional Nanomaterials Director; Shirley Strum Kenny, SBU President; Michael Holland, DOE's Brookhaven Site Office Manager; Doon Gibbs, BNL Deputy Director for Science & Technology; and Robert McGrath, SBU Provost and Vice President for Brookhaven Affairs.

426th Brookhaven Lecture: 'The Pesky Neutrino,' 6/27

Neutrinos are nearly massless particles that interact so weakly with matter that they are able to pass right through people, the earth, everything, without interaction. In the time it took you to read that sentence, approximately 500,000,000,000 neutrinos produced in the sun passed through your fingernail.

The neutrino was proposed by Wolfgang Pauli in 1930 to rescue energy conservation in radioactive decay. Measurements of the energy spectrum of electrons emitted in the decay of radioactive substances showed that energy was apparently not conserved. Pauli suggested that this missing energy might be carried off, unseen, by a nearly massless, neutral particle which was escaping detection.

Pauli's theory was included in a comprehensive theory of radioactive decays proposed by Enrico Fermi in 1934. Fermi called Pauli's hypothetical particle the "neutrino," and scientists found that this "little neutral one," could explain many experimentally observed results. But the neutrino was difficult to detect. Not until 1959 was the discovery of a particle fitting the neutrino's expected characteristics announced by



Roger Stoutenburgh D2010607

Clyde Cowan and Fred Reines, who received the 1955 Nobel Prize in physics for his contribution to the discovery.

Since then, much more has been discovered about the neutrino — much of it by BNL scientists — but more remains to be discovered. To learn about "The Pesky Neutrino" — its past, present, and possible future — join David Jaffe of the Physics Department when he gives the 426th Brookhaven Lecture at 4 p.m. on Wednesday, June 27, in Berkner Hall.

As Jaffe relates the history

of the neutrino and its three forms, he will discuss the essential role it has played in scientists' understanding of the weak force — the force that is believed to cause matter to decay. Just as interesting, as he will explain, is the recent evidence that neutrinos have mass, which is the only evidence in particle physics that is inconsistent with the Standard Model (the presently accepted theory of how matter behaves). Jaffe will also include in his talk plans for future experiments and how their results might shed light on the origin of the mass of particles like protons and electrons and on the matter-antimatter asymmetry of the universe.

David Jaffe, who earned his Ph.D. in physics at Stony Brook University, joined BNL in 2000. He is a participant in two experiments studying the phenomena of neutrino oscillations: the MINOS experiment at Fermilab that is currently taking data and the Daya Bay, China, experiment that will begin taking data in a few years.

All those who would like to join the lecturer for supper at an off-site restaurant after the talk should contact Deborah Kerr, dkerr@bnl.gov, Ext. 3857.

— Liz Seubert

BNL's NASA Summer School Helps Create Pipeline of Space Scientists



Joseph Rubino D0030607

Students and scientists from around the globe and from throughout the U.S. have come to New York this month to participate in the fourth annual NASA Space Radiation Summer School at BNL. The group will work in the Medical Department and NASA Space Radiation Laboratory (NSRL) — a unique facility that simulates the harsh radiation environment of outer space — to study the possible risks astronauts may face during future long-term space flights. The program is sponsored by NASA and organized and managed by BNL, Loma Linda University Medical Center (LLUMC), and Universities Space Research Association.

Even as NASA plans a mission to Mars, an outpost on the Moon, and exploration of near-Earth asteroids, many potential health risks to astronauts remain unknown.

"While there is a wealth of data describing the effects of conventional radiation like x-rays, the same is not true for the types of radiation present in space. It is essential to define the potential risks of exposure to space radiation and, if necessary, develop effective countermeasures to permit safe missions of longer durations than in the past," explained Peter Guida, Medical Department Liaison Scientist for this program at BNL. Guida is working with Eleanor Blakely of Lawrence Berkeley National Laboratory (LBNL), the 2007 NASA Summer School Director.

Said Blakely, "Our goal is to attract the highest quality students from diverse scientific backgrounds and help train them to be the next wave of space radiation researchers." The program has three scientific modules: physics, led by Cary Zeitlin of LBNL; biology, led by Gregory Nelson of LLUMC; and experimental methods, led by Betsy Sutherland of BNL.

Studies at NSRL simulate space radiation to learn how the intense rays may promote the development of cancer, as well as how this radiation can affect the central nervous system and other organ systems of the body. NSRL researchers are also looking at ways to protect against these dangers

(continued on page 2)

CALENDAR OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— EACH WEEK —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermediate, Advanced classes. Various times. All are welcome. Learn English, make friends. See www.bnl.gov/esol/schedule.html for schedule. Jen Lynch, Ext. 4894.

Mondays: BNL Social & Cultural Club
Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

Mondays: Pilates
12:15 & 5:15 p.m. Rec. Hall. Ext. 5090.

Mondays: Jiu Jitsu Club
6-7:30 p.m. B'haven Center. All levels, ages 6 & up. \$10/class. Tom, Ext. 4556.

Mondays & Thursdays: Kickboxing
\$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

Mon., Tue. & Thu: Ving Tsun Kung Fu
Noon-1 p.m., B'haven Center, North Room. Taught by Master William Moy. Scott Bradley, Ext. 5745, bradley@bnl.gov.

Mon., Thurs., & Fri.: Tai Chi
Noon-1 p.m., B'haven Center North Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tues. & Thurs: Jazzercise
Noon, Rec. Hall. Ext. 5090.

Tuesday & Thursday: Aerobic Fitness
5:15 p.m., Rec. Hall. 10 classes for \$40 or \$5 per class. Pat Flood, Ext. 7866, flood@bnl.gov.

Tuesday & Thursday: Aqua Aerobics
5:15 p.m., Pool. Ext. 5090.

Tuesdays: Welcome Coffee
10 a.m.-noon, apartment area gazebo. First Tuesday of every month is special for Lab newcomers and leaving guests. Lisa Yang, 979-3937.

Tuesdays: BNL Music Club
Noon, B'haven Center, North Room. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Toastmasters
1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, Room 160. Guests, visitors always welcome. www.bnl.gov/bera/activities/toastmasters/.

Tue., Wed. & Thu: Rec Hall Activities
5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Wednesdays: On-Site Play Group
10 a.m.-noon, Recreation Bldg. An infant/toddler drop-in event. Parents meet while children play. Petra Adams, 821-9238.

Wednesdays: Ballroom Dance Class
B'haven Center, N. Ballroom. Instructor: Giny Rae. Arup Ghosh, Ext. 3974; Donna Grabowski, Ext. 2720; or Vinita Ghosh, Ext. 6226.

Wednesdays: Weight Watchers
Noon-1 p.m. Michael Thorn, Ext. 8612.

Wednesdays: Yoga
Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov.

Wednesdays: Pilates
5:15 p.m., Rec Hall. Ext. 5090.

Thursdays: Reiki Healing Class
Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholz, Ext. 2027.

Fridays: Family Swim Night
5-8 p.m. BNL Pool. \$5 per family.

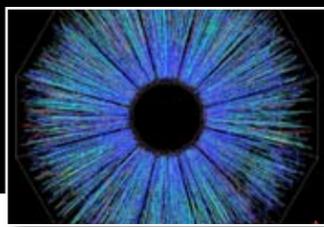
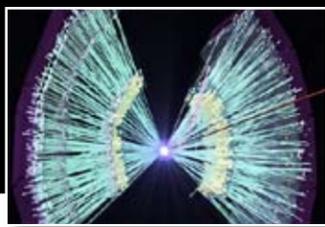
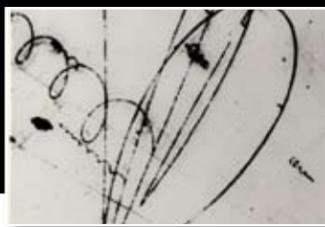
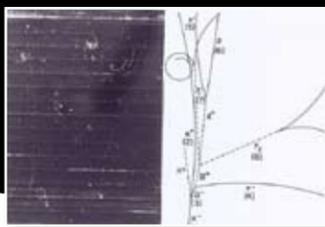
Fridays: BNL Social & Cultural Club
Noon-1 p.m., B'haven Center, South Room, free beginners dance lessons. 7-11:30 p.m. North Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

CIGNA: Tuesdays, Bldg. 400

A CIGNA Healthcare representative will be on site in Human Resources, Bldg. 400, on Tuesdays, to assist with any claims issues that you have been unable to resolve yourself. Janice Petgrave will be available for 30-minute meetings, by appointment only, 10 a.m.-1 p.m. Bring all pertinent documentation. To schedule, call Linda Rundlett, Benefits Office, Ext. 5126.

Then & Now

What do these four pictures have in common? See "Then & Now" in next week's Bulletin.



Integrated Safety Management Awareness

Integrated Safety Management (ISM) is the framework used to help guide all work at BNL and is a key requirement of BNL's contract with DOE. ISM's five core functions call for the Lab, as well as each employee, to define the scope of work; identify and analyze all hazards; develop and implement controls for those hazards; work within these controls; and provide feedback to improve safety in future work.

BNL will undergo a crucial ISM review this August. The auditors will likely interview a wide cross-section of BNL employees. Below are the second in a series of general ISM questions for managers, supervisors, and staff. The text below the questions gives examples of processes that may be appropriate as references for understanding the Lab's ISM program.

Question for Managers: Do work-planning processes provide for early involvement of workers and Environmental, Safety & Health staff to fully define the work and allow effective identification of hazards?

Question for Staff: How do you define the scope of work?

Response: The scope of work is fully defined through job-site walk-downs, pre-job briefings, participation in the development of work permits, radiological work permits, experimental safety reviews, technical work documents and standard operating procedures. Supervisors and managers conduct plan of the day meetings and toolbox meetings — including activity/hazard discussions and assignment of work activities.

For more information, contact Steve Coleman, at Ext. 8705 or coleman@bnl.gov.

NSLS-II Users Workshop, 7/17 & 18

To update the user community on the status and plans for NSLS-II, the Lab will welcome participants at a workshop July 17-18. The goals of the workshop are to: describe the conceptual design and current status of NSLS-II; describe the process for beam-line development at NSLS-II; discuss plans for transitioning from NSLS to NSLS-II; and provide opportunity for feedback and input.

For more details on the workshop and registration information, go to www.bnl.gov/nsls2/workshops/UserWorkshop.asp.

BNL's NASA Summer School

(cont'd)

through shielding and other strategies to minimize the risk to space travelers.

NSRL is a \$34-million facility that was built by Brookhaven Lab with funding from NASA with the cooperation of the Office of Nuclear Physics within DOE's Office of Science. Operational since 2003, the facility is part of the Lab's collider-accelerator complex, which is maintained by the DOE Office of Science's nuclear physics program and receives incremental

operations and maintenance funding from NASA. It employs beams of heavy ions extracted from BNL's Booster accelerator that are the best in the U.S. for studying the effects of radiation on living organisms. Scientists from more than 20 research institutions from throughout the U.S. and abroad work year-round at NSRL, supported mainly by NASA funding, to learn about the possible risks to space explorers exposed to deep-space radiation.

Summer Fun at BNL's Science Learning Center!

The BNL community and their families are invited to the Science Learning Center on three Fridays: July 6, and August 3 and 17, from noon to 1:30 p.m., to explore the many interactive exhibits and visit the 3D visualization theater. Visitors will be able to see what makes the Science Learning Center such a popular visit for more than 25,000 elementary school children each year. A limited selection of science-related toys is also available to buy in the gift shop. An adult must accompany children under 14 years old.

Summer Student Talent Show, 7/24

The Office of Educational Programs invites all the Lab community to attend their annual Summer Student Talent Show on July 24, at 5:30 p.m. in Berkner Hall.

Anyone who would like to perform in this summer's Talent Show should contact Tabatha Wyche, Ext. 4503.

Nanoscience Roundtable, 6/29

With the May 21 dedication of the Center for Functional Nanomaterials, Brookhaven began what will be a major expansion of nanoscience research at the Laboratory.

As part of the Laboratory's effort to determine employee

interests related to nanoscience research, members of the BNL community are invited to participate in a roundtable dialogue on Friday, June 29, 1:30 – 2:30 p.m., in the conference room on the ground floor of the Research Support Building.

Nanoscience 101

On May 21, the BNL community celebrated the dedication of its new Center for Functional Nanomaterials (CFN). Science and technology based on nanoscience is expected to be revolutionary, and could lead to groundbreaking advances in the design and fabrication of a wide range of products — from automobile tires, to vaccines, to computer chips, to objects not yet even imagined.

Below is the sixth in a series of questions and answers to help familiarize members of the BNL community with nanoscience in general, the types of research planned at the CFN, and health and safety aspects of CFN operations.

Q: Can nanoparticles be disposed of safely? How and where will they be disposed of at BNL? Is there a need to develop specific regulations and train staff?

A: The Environmental Protection Agency (EPA) has not yet established new regulations for nanomaterial disposal. The EPA is funding grants to universities to define the characteristics of certain nanomaterials better in order to increase its understanding of potential risks. EPA will then consider the results to determine if its regulations need revision. However, this process will not be completed in time to address the nanoscience research that is under way now or in the near future.

DOE is aware that federal regulatory agencies may not develop the regulatory framework in time to address the start of work at its five nanoscience research centers (NSRCs). For this reason, the five DOE NSRCs have been working together since the summer of 2004 to assess the information available from the regulatory and scientific communities. This information, involving disposal and exposure controls, has been incorporated into the NSRC's guidelines and BNL's SBMS. These guidelines will be used until national guidelines are adopted by appropriate federal agencies. In general, BNL will employ conservative waste management approaches to prevent nanomaterials from being released to the local environment.

BNL scientists have already begun generating the first nanomaterials-containing waste streams. Under strict guidelines, researchers are not allowed to dispose of these materials through the Lab's sanitary system (down the drain) or regular trash. Instead, nanomaterial-bearing wastes are currently collected and sent to the Lab's Waste Management Facility (WMF) as hazardous waste or as non-hazardous industrial waste, based on the overall hazards associated with the material as determined by the experimental safety review process. Trained staff members at the WMF determine how best to handle this waste to reduce any potential risks associated with it. This may include processing the waste, if there is an appropriate waste stream, or storing the material until all the risks are understood. Since only very small quantities (much less than 1 gram) are typically produced, nanomaterial storage should be straightforward until federal regulations are established.

Training materials are currently being developed to provide subject matter experts and scientific staff with the information they need to implement the waste disposal requirements in the SBMS subject areas related to nanomaterials. The NSRC working group is developing a more generic nanosafety awareness training module to supplement required training for environmental safety representatives involved in nanoparticulate work.

Q: What controls does BNL have in place to ensure that nanoparticles do not escape into the atmosphere?

A: BNL environment, safety, and health personnel are currently assessing each proposed nanoscience experiment in detail to ensure that the experimenters are aware of the conditions and potential hazards associated with each experiment. Currently, it is anticipated that most of BNL nanoscience research (greater than 90 percent) will involve bound or "fixed" nanomaterials attached to larger substrates, or in solution, that will not be capable of escaping into the environment, given established controls.

Very strict lab controls will be used for the small percentage of work that will involve small quantities of nanoparticles that are not fixed or bound, to minimize any potential risks associated with these materials. Controls may include the use of high efficiency particulate (HEPA) filters or the use of closed systems (such as glove boxes).

The purpose of the roundtable is to engage employees interested in nanoscience and to get feedback from them that can help the Laboratory further develop its communication and involvement activities.

Nanoscience-interested members of the BNL community are requested to register prior to the meeting by contacting the Community Relations Office's Jeanne Marie Petschauer at Ext. 2397 or jmpets@bnl.gov.

Help for Adults, Children Who Stutter

Stuttering is a problem that affects many children. The onset of stuttering is typically between the ages of two and seven, but approximately 98 percent of the cases develop by the age of ten. A significant percentage of children "outgrow" stuttering, but for many, the problem persists throughout adolescence and adulthood.

The psychological effects of stuttering in children are often profound and can severely restrict the normal expression of a child's personality in social settings and can hurt their academic performance and self-esteem. Stuttering can also adversely affect many aspects of an adult's life, even if he or she has had access to conventional speech therapies.

Jeffrey Davis, a Firefighter/EMT here at the Lab, has given us permission to tell his story.

Davis had been treated with speech therapy for a stuttering problem since junior high school, although he had limited success. He continued with speech therapy as an adult at various intervals, but the stuttering never improved.

This article was written by Nancy Losinno, who heads the Lab's Employee Assistance Program.

Through the Lab's Employee Assistance Program (EAP), Davis was directed to the National Association for Speech Fluency to get information about Fluency Master, a miniature, wearable, electronic device that looks like a hearing aid. This device has been found to significantly enhance the speech fluency of most people who stutter by modifying physical factors that affect speech. The speed and amount of improvement can be dramatic, regardless of whether the degree of stuttering is mild, moderate or severe.

The effectiveness of the Fluency Master has been demonstrated in clinical trials, and researchers report an 80 percent success rate in persons who had used the Fluency Master device.

Spurred by this information, Davis and his wife began the process of obtaining a custom-fitted earmold by a licensed

audiologist. Once Davis received his custom-fitted device, he met with a speech pathologist to be trained on how to use it. He will need some short-term speech therapy to maximize the benefits of the device, but his stuttering has greatly improved. Davis wanted to share his story to help others, especially those whose stuttering has not been successfully treated with speech therapy.

For more information, go to: www.stutteringcontrol.com or call the National Association

for Speech Fluency at 1-800-785-4496. In addition, the Lab's EAP office has a video that provides information on the Fluency Master. To borrow the video, contact Nancy Losinno, Ext. 4567.



Roger Stoutenburg D2940507

BNL Certifies 59 Supervisors in Rigorous Training



Roger Stoutenburg D2940507

This year, 59 BNL supervisors completed the training to achieve their supervisor certificates, a significant investment for the future of the Laboratory. To earn the certificate, supervisors were required to complete eleven courses totaling nearly 60 hours of training. The program was designed for new and experienced supervisors who want to gain and improve their performance management skills. The recipients were presented with their certificates at an awards ceremony held on May 14. For more information about the Certificate in Supervision program, contact Starr Munson, munson@bnl.gov or Ext. 7631. Information can also be found on the web at www.bnl.gov/HR/staffdev/Supv_Certificate.asp.

The following supervisors achieved certification this year: Andrew Ackerman, Richard Allingham, Thomas Baldwin, Roy Barone, Ron Bauman, John Bohenek, Carl W. Booker, Ralph Brown, Cheryl Burns, Charles Carlson, Barbara Carreras, Christine Carter, Richard Casella, Randolph Church, Gretchen Cisco, Steven Coleman, Ruth Comas, Nicholas Contos, Joseph Cracco, Roy D'Alsace, Phyllis D'Avanzo, John DeBoer, Gail Donoghue, Catherine Ennis, Joseph Falco, Michael Fulkerson, John Gallagher, Henry Hauptman, Marion Heimerle, Marie Hobson, Lawrence Hoff, Robert Howe, George Hughes, Wayne Hulse, Raymond Karol, Kenneth Koebel, Richard Kuczarski, Daniel McCafferty, Dean McDonald, Kim Mohanty, Ronald Ondrovic, Susan Pepper, Susan Perino, Wayne Rambo, Gloria Ramirez, M. Claire Rintundi, Alistair Rogers, Robert Scheuerer, John Searing, John Selva, Linda Sinatra, Jeffrey Swenson, Thomas Tallerico, Frederick Wahlert, Susan White-DePace, Jessica Wilke, Dantong Yu, Paul Zahra, and Ron Zapasek.

On-Site Nursery School Enrollment

Attention, parents of 3-and 4-year-olds: Upton Nursery School is an on-site, not-for-profit, parent cooperative preschool that meets at the Recreation Hall in the apartment area. The school provides a warm, caring, and stimulating environment for preschool-age children.

A two or three-day mornings schedule is available for a reasonable tuition fee. Classes are forming now for the fall 2007-2008 school year. For more information or to register your child, contact Katalin Petreczky, 821-4131, julika@optonline.net, or visit the school's website at www.bnl.gov/nurseryschool.

BSA Noon Recital, 6/27

On Wednesday, June 27, artists from the "Pianofest" intensive workshop in piano performance, based in East Hampton and now in its 19th year, will present a lunchtime recital in Berkner Hall at noon. Pianofest Director Paul Schenly will introduce a selection of workshop attendees, who will each contribute to the musical program. Sponsored by BSA, the company that manages BNL, the recital is free, informal, and open to the public. Bag lunches may be brought into the auditorium.

Arrivals & Departures

— Arrivals —

Linda Morrell..... Medical
Salvatore Picataggio C-AD
Philip Sarcione..... Dep.Dir. Oper
Fu-Chen Yang Medical

— Departures —

Jennifer Graham Medical
Charles Meeusen.....ITD
Carlee Ogeka.....ES/WM
Aakin Patel.....ITD
Helmut Thiel..... Safeg. & Sec.

In Memoriam

Chester Reed, who arrived at the Lab on October 18, 1965, as an electrician A in the Plant Maintenance Division, and retired on November 10, 1983, died on November 26, 2006. He was 82.

Bernard McAlary, whose first link with BNL began on October 14, 1963, as Senior Auditor for Associated Universities, Inc., joining the Lab's Fiscal Office as Fiscal Officer on July 1, 1966, died on December 1, 2006, at age 80 on December 1, 2006. He had become BNL's Business Manager on July 1, 1987, and he retired on January 31, 1996.

Lorraine Tassinari, who joined the Medical Department on March 1, 1957, as a junior technical specialist and retired as a medical associate III on April 31, 1985, died at age 84 on December 9, 2006.

***Frank Rumph**, who joined BNL as a technical associate II on August 22, 1949, and retired from the Physics Department on July 31, 1987, died on December 18, 2006. He was 81.

Irving Feigenbaum, who joined the Proton Synchrotron Department on April 9, 1949, as a technician B, and retired 50 years later from the Collider-Accelerator Department as a senior technical associate on May 18, 1999, died at the age of 85 on January 17, 2007. He had remained a guest technical collaborator until 2001.

George Arnold, who joined the Department of Nuclear Energy on February 5, 1962, as an intermediate technician, died on January 22, 2007, at age 80. He had retired from that department as a senior technical specialist on September 26, 1986.

Robert Kowalski, who joined the Alternating Gradient Synchrotron Department as an intermediate technician on December 13, 1965, and retired from the Relativistic Heavy Ion Collider Project on June 30, 1993, as a technical associate I, died on February 5, 2007. He was 76.

**Note: The Bulletin greatly regrets that in a previous In Memoriam for Frank Rumph on March 16, 2007, his name was misspelled.*

CALENDAR

— TODAY —

Friday, 6/22

***RHIC, AGS Annual Users' Meeting**
9 a.m. Bldg. 510, Large Seminar Room. Last day of plenary sessions. All are welcome. For more information, see www.bnl.gov/rhic_ags/users_meeting.

— WEEK OF 6/25 —

Monday, 6/25

IBEW Meeting

6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

Wednesday, 6/27

***BSA Noon Recital, 'Pianofest'**

Noon. Berkner Hall. "Pianofest" workshop attendees will present a musical program, directed by Paul Schenly. All are welcome to this free concert, sponsored by BSA. Visitors to the Lab of 16 and over must carry a photo ID.

***Brookhaven Lecture**

4 p.m. Berkner Hall. David Jaffe of the Physics Department will talk about "The Pesky Neutrino." All are welcome to this free lecture, open to the public. Visitors to the Lab of 16 and over must carry a photo ID. See story, page 1.

Thursday, 6/28

Defensive Driving Course, Part II

6-9:15 p.m. Brookhaven Center. For those who took Part I on 6/21. For more information, call Sarah Wiley, Ext. 4207.

Friday, 6/29

***Nanoscience Round Table**

1:30-2:30 p.m. Research Support Bldg., Bldg. 400, Conf. Room. All are welcome. See notice on page 2.

— WEEK OF 7/2 —

Wednesday, 7/4

Independence Day Holiday.

The Lab will be closed to celebrate the Independence Day holiday. No Bulletin will appear this week.

Friday, 7/6

See BNL Science Learning Center

Noon-1:30 p.m. Science Learning Center open to Lab community and their families. Also, buy science-related toys. An adult must accompany children under 14 years old. See notice, page 2.

Sunday, 7/8

***Sunday Tours: Life Sciences, Music**

10 a.m.-3 p.m. BNL open to the public for tours on Sundays, July 8 through August 19. The Whiz-Bang Science Show will be given each Sunday. On this Sunday, learn about some of BNL's Life Sciences research, such as addiction and its effect on the brain, DNA sequencing, how to determine a molecule's structure. Also, this Sunday only will feature a culture celebration, with music, dancing, more. See more details on page 4 and in future Bulletins.

— WEEK OF 7/9 —

Wednesday, 7/11

BSA Noon Recital

Noon. Berkner Hall. Pianist Michelle Cann will perform works by Schubert, Ginastera, Debussy, Chopin, more.

Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.

BNL Open to Public On Summer Sundays, 6/8 - 8/19

BNL will again open its doors to the public this summer, every Sunday from July 8 through August 19. The Lab will feature a different tour each week, including, on July 22, a visit to its newest facility, the Center for Functional Nanomaterials. Both adults and children can enjoy a variety of entertaining activities, including the Whiz Bang Science Show and the Brain Teasers exhibit each week. Celebrate the Lab's sixtieth anniversary, and collect commemorative souvenirs while supplies last.

Summer Sundays are offered free of charge, and no reservations are needed. Visitors may arrive any time between 10 a.m. and 3 p.m. The Whiz Bang Science Show (see photo below) will be staged at 10:30 a.m., noon, 1:30 p.m. and 3 p.m. each Sunday. All visitors age 16 and over must bring a photo ID.



Roger Stoutenburgh D5160606

The full Summer Sundays schedule follows:

- July 8** Life Sciences - Investigate the Living World - also free music, with musicians such as Sam Bluzman Taylor, the Lab's own George Bostick, That 70's Band, others. This Sunday only,
- July 15** Special tour of the National Synchrotron Light Source
- July 22** Explore the New Center for Functional Nanomaterials
- July 29** Hands-On Fun at the Lab's Science Learning Center
- August 5** Visit the Firehouse & Learn About Safety
- August 12** ... Visit National Weather Service on the BNL site
- August 19** ... Discovery at the Relativistic Heavy Ion Collider

Classified Advertisements

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

ADMINISTRATIVE SECRETARY (A-2) Requires formal secretarial training or equivalent plus four years of relevant experience. Must have experience in the GIS system, PeopleSoft HR, PeopleSoft Financials, Web Requisitions, arranging domestic and foreign travel, and setting up and conducting major workshops including travel arrangements, participant support, agenda, office space and proceedings. Communication with guest and visitors, processing and maintaining group publications and setting up web pages for individuals and groups is required. Physics Department. Send CV to tbuck@bnl.gov, referring to Position No. TB 4321.

OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in chemistry or a related field. Experience in preparation and characterization of transition metal complexes and organometallic compounds, excited-state photophysics and photochemistry, electrochemistry, mechanistic and kinetic studies in solution, time-resolved spectroscopy, and techniques for characterization (UV-vis, FTIR, NMR, GC, ESMS, stopped-flow, X-ray diffraction, XANES/EXAFS, etc), DFT and/or quantum chemistry calculations, and modeling of solid/liquid interfacial processes is desired. A strong background in physical inorganic chemistry is a plus. The successful candidate will conduct basic research in experiment or theory toward the development of multielectron-transfer catalysts for water oxidation, the investigation of their physical and chemical properties, and a mechanistic understanding of their water oxidation chemistry. Under the direction of E. Fujita, Chemistry Department. Send CV to felicia@bnl.gov, referring to Position No. FH 4582.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in chemistry or a related field. Experience in preparation and characterization of transition metal complexes and organometallic compounds, excited-state photophysics and photochemistry, electrochemistry, mechanistic and kinetic studies in solution, time-resolved spectroscopy, and techniques for characterization (UV-vis, FTIR, NMR, GC, ESMS, stopped-flow, X-ray diffraction, XANES/EXAFS, etc), DFT and/or quantum chemistry calculations, and modeling of solid/liquid interfacial processes is desired. A strong background in physical inorganic chemistry is a plus. The successful candidate will conduct basic research in experiment or theory toward the development of multielectron-transfer catalysts for water oxidation, the investi-

gation of their physical and chemical properties, and a mechanistic understanding of their water oxidation chemistry. Under the direction of J. Muckerman, Chemistry Department. Send CV to felicia@bnl.gov, referring to Position No. FH 4583.

PROJECT ENGINEER I/ESH&H COORDINATOR (P-9) - Requires a BS or MS degree in a science discipline and a minimum of 10 years' relevant experience. Comprehensive knowledge, skills and experience within the discipline of ESH&H is required. Knowledge of BNL and DOE safety standards is very desirable. Professional certification within an ESH discipline is desirable (CIH, CSP, CHP, CHMM). Excellent communication (oral and written) and interpersonal skills are required to work with a diverse internal and external workforce and to achieve compliance within all aspects of ESH&H. Experience with accelerator-related hazards and associated controls is desirable. The NLSL ESH Coordinator will be the principle liaison between the department, BNL, and DOE ESH&H community. Responsibilities include maintaining department ESH documentation, direct incident investigations, directing the department response to external audits, leading department internal ESH&H committees, participating in ESH reviews, coordinating self-assessments, and supporting the routine ESH activities associated with operation of the accelerator and the NLSL experiment program. Reports to the NLSL ESH&H Manager. Send CV to sobrito@bnl.gov, referring to Position No. NS 3267.

APPLICATIONS ENGINEER (I-6) - Requires a bachelor's degree in computer science or a related field, or six years of directly applicable experience, or a combination of education and experience. A minimum of 3 years recent programming work experience designing and building data centric applications (client-server and web-based) using ASP, Visual Basic, .NET, Visual Studio 2005, and Crystal Reports in an enterprise environment required. Must demonstrate a thorough understanding of object-oriented design concepts and relational databases, and the fundamentals of requirement specification, design, coding and testing of information systems. Must have proficiency in most, if not all of the following: .NET, IIS, Oracle, SQL Server, MS Access, HTML, JavaScript and Crystal Reports. Familiarity with Compliance Suite is a plus. Excellent oral and written communication skills are essential, as is the ability to handle multiple priorities and meet deadlines. Responsibilities will include development and maintenance of new and existing applications including forms and reports for data entry, querying, and reporting for enterprise databases; design and development of Web-based user interfaces for safety professionals; and technical and end user documentation. Will regularly work on projects with safety professionals

to develop specifications based on their requirements and resolve all project programming issues. Safety & Health Services Division. Send CV to morales@bnl.gov, referring to Position No. RM 4627.

SECURITY POLICE OFFICER II (2 positions) - Requires an AAS in criminal justice plus relevant working experience; or several years' police or security experience; or military security background. Must successfully pass a physical examination (including drug/alcohol screening) and a psychological examination. Must run a half-mile in 4.40 minutes and run a 40 yard prone-to-running dash in 8.30 seconds (this standard must be completed successfully on an annual basis). Must be able to obtain a Q-level security clearance which requires that you be a US Citizen, have no felony convictions or other serious offenses, and have an honorable discharge from military, if served. Also requires a valid drivers' license and the ability to work shifts. Safeguards & Security Division dianah@bnl.gov, referring to Position No. DH 3910.

Motor Vehicles & Supplies

- 05 HARLEY D. 883 SPORTSTER CUSTOM** - excel., w/shield, forwrd foot ctrls., hwy. lights., eng. guards, saddle bgs, more. 3700 mi. \$6,900/neg. Ext. 3505 or 929-6467.
- 02 TOYOTA CELICA** - GT, carbon blue, 5 spd., excel. 83K mi. \$9,000. Ext. 4924.
- 02 YAMAHA TTR 125** - excel. beginner dirt bike, well maint., runs & looks excel. \$1,100. Ext. 4026.
- 00 MERCURY ROUSH COUGAR** - pwr. s/ roof, dual fr. & aide airbgs, cd, prem. sound, 17" cust rims. 55K mi. \$8,500. 821-7412.
- 00 FOREST RIVER CHEROKEE** - 5th wheel, 30', excel., bunks, big slide, slps 8, all opts. \$10,500/neg. Rich, Ext. 7160 or 929-8294.
- 99 NISSAN SENTRA** - 5 spd manual, 4dr sedan, a/c, am/fm/cass., new batt, 160K, fair cond. \$2,300/neg. Wei, Ext. 3744.
- 98 VOLVO WAGON V70** - a/t, p/w, c/c, abs, cd, excel. cond. 179K mi. \$4,100. Dejan, Ext. 3078 or 834 -3158.
- 98 FORD EXPEDITION XLT** - 4WD, 5.4 liter, 3rd seat, lthr., 6 CD, loaded, excel., KBB val. \$8,500. 126K mi. \$7,100. Rich, Ext. 7294.
- 97 MAZDA 626ES** - 2.5L p/w/ac/p/l, lthr., 6 cyl., 5 spd, new clutch, slave, valve cvr gsks, tuneup, alloy 106K mi. \$2,500. 902-8188.
- 96 FORD RANGER** - 4cyl., manual 5 spd., w od, 6' bed, new tires, shocks, no a/c. 110K mi. \$2,200/neg. James, Ext. 4026.
- 96 LINCOLN TOWN CAR** - excel. cond., 8cyl., a/c, c/c, am/fm/cass., leather, all pwr., 91K mi. \$6,000/neg. 521-5301.
- 96 DODGE INTREPID** - radio/cass, a/c, orig owner. 79K mi. \$3,000/neg. 361-8583.
- 95 MAZDA 626** - 2.0L, 4 cyl., auto rem. start, pioneer CD w/lpod input, new tires, exhaust, rec. tuneup, 114K mi. \$2,000. 902-8188.
- 95 BMW 325i** - 2.5L, 6 cyl., 4dr, a/t, well maint., v. reliable, gar., 2nd owner. 172K mi. \$3,900/neg. 886-1316.
- 94 INFINITI Q45A** - fully loaded, gd. cond., 105K mi. \$2,900. 924-3141.
- 90 TOYOTA CELICA ST** - 1.8L, 2dr. sports bdy, a/t, p/s, a/c, 1 yr. time belt, v. rec. inspc. mst sell. 85K mi. \$1,900/neg. 384-3589.
- BIKE** - '05 GSXR600, blue/white, helmet same color, cover, 1,000 mi., mint, \$7,500. 764-8784.

Boats & Marine Supplies

- 19' GRADY WHITE TOURNAMENT** - 130 hp Yamaha, mgic tilt trailr, full encl., VHF, depth finder, more. \$8,000/neg. 878-8302.
- 26' GRADY WHITE SEAFARER** - 2002, 226 hdotp w/Yamaha 225-4 stroke '03 dbl axel trailr, mint. \$43,900/neg. 587-7876.
- 21' STIEGERCRAFT** - 120 Hp Johnson, PT&T. Custom Center Plothouse, New Floor. Photo Avail. \$3750. Ext. 5366.

Furnishings & Appliances

- AIR CONDITIONERS** - 2-5000 Btus, \$20 ea., 1-8400 Btu, rarely used, \$40, all excel. 744-4237.
- BED** - king size, unused, \$150; computer desk, 60\$; rocking chair, \$150; love seat, \$100. Mamta, Ext. 2176 or 355-5630.
- BED STAND** - \$5; metal shelves, \$20. 680-2764.
- BEDROOM SET** - 7 pc queen, 4-post cherry ask. \$1,000; x-box 360 w/saint row, tomb raider, dead rising ask. \$250. 289-3267.
- BOOKCASES** - 2, 3 blk/white shelves, \$10 ea., needs paint, lg. white table, \$15; blk. triangle end tables, \$5. Jen, Ext. 8426.
- COUCH, DINETTE** - Fabric Couch w/2 recliners, \$150; Dinette set w/two stools, \$125. Bob, Ext. 7189.
- DAYBED** - twin mattress w/cloth cover for daybed, gd. cond. \$25; full size bed-frame, metal \$10. must pk/up. Ext. 7647.
- DEHUMIDIFIER** - auto shut off \$75, excel. cond. Joe, Ext. 3783 or 487-1479.
- DESK** - Exec type desk, 2 file drawers, 2 pencil drawers, modern look, \$50. Pic. Ext. 4901 or 580-2940.
- DINETTE** - solid oak table, Col. style, 2 leaves, pedestal base, 6 oak chairs, \$375 firm. 878-9020.
- DINING ROOM** - table w/leaves & pads, china cabinet, 6 chairs, excel. cond., \$300. 289-6652.
- DINING ROOM TABLE** - round oak, heavy, 4' dia plus leaf, 4 captain's chairs, all excel. cond. \$200. 727 2346.

- FURNITURE** - 2-5 drawer bureaus; 1 desk w/3 drawers, must pk/up, items can be sold sep., \$70 for all. Susan, Ext. 7647.
- HUTCH** - 2 pc., sm., maple fin., w/brass trim \$100; exercise bench/home gym w/ weights \$45; all excel. cond., 281-4871.
- KITCHEN SET** - kit. set w/4 chairs, rose & beige tones, mint cond., highback chairs, ask. \$200. Angela, Ext. 5169.
- KITCHEN/DINING TABLE** - brand new, no chairs, farm house style, 3'x5', lt. pine, chop block look, pics. \$100/neg, Ext. 5690.
- LAMP** - hurricane w/white glass shade 20", \$10; pr trad style white brass lamps w/ shades 30", \$50. Ext. 5225 or 422-1033.
- MATTRESS** - Sealey Posturepedic Presidential. Like new. \$200. 865 405-9734.
- MICROWAVE** - blk, G.E. Spacemaker XL1400, excel. cond., \$65/neg. Ext. 2897.
- TOILET BOWL** - One piece, low profile, low volume, beige, needs float, \$45. Bill, Ext. 2906 or 929-6189.

Audio, Video & Computers

- CAR STEREO** - Pioneer, 50W/channel, CDR-RW/MP3/WMA playback, sat/lpod cmpat, OEL display/scrsvr, \$180. 434-5824.
- COMPUTER CASE** - rolling, "Patriot" Wenger, telescp. handle, 4 cmprtmts, fits 15"-15.3" laptop, \$50/neg. Melanie, Ext. 5810.
- LAPTOP** - HP Pavilion ZT3000, 1.7GHz centrino, 768MB, 60GB, 15.4" WSXGA, DVDRW, wifi, WinXP SP2, case, \$550. Ext. 4620.
- STEREO** - car, Durabrand, in-dash CD/MP3/CDRRW playback w/MP3 dsply, 45wx4, detach. pnl w/rem, \$100. Laura, Ext. 7842.
- TV** - 19" Sanyo; Sony DVD player; Sharpe VCR, \$50; Panasonic fax/phone, \$20; Sony am/fm/cd stereo player, \$10. 680-2764.

Sports, Hobbies & Pets

- BICYCLE** - LandRider, auto shift, ridden only 3 times, check it out on Landrider.com. orig. \$500 ask. \$350. 286-0654.
- BIKES** - BMX, dk 8-pack, ridden once, minor scratches, ask. \$200; G.E. space-maker XL1400, excel. \$65/neg. 804-7501.
- CAMERA** - underwater, Nikonos-V, 35mm, SB-103, spd light, 3 macro attachmnts., excel. cond., \$600. Ext. 3555.
- FABRIC** - yards & yards, assorted, \$.50/ yd. Sue, Ext. 7235 or 399-7997.
- GUNS** - priv. collection, shotguns, rifles, pistols, call for details. 587-7876.
- KNEE/WRIST GUARDS** - New, size large, \$10. Ext. 4340.
- LIFE PRESERVERS** - children's, 4, life-guard approved, \$15/ea. Ext. 4697 or 758-3952, eves.
- ROLLERBLADES** - pwr. Flex Orbit inline skates, men's sz 6, \$10. Ext. 2492.
- WET SUIT** - Children's full 1 pc xl suit, 3mm, blk w/blu trim, excel., \$50. Bill, Ext. 2906 or 929-6189.

Tools, House & Garden

- CRAFTSMAN ITEMS** - Chainsaw, \$75; elect. drill, 3/8, \$15; compressor, tankless, sml, \$25; poll saw, \$10. 487-1479.
- FAN** - wndw/flr, Holmes Air, reversible/3 spds, Mod. HAWF 1012ER, \$15. Ext. 3217.
- LAWN MOWER** - w/mulch bag, runs well, lightly used, \$55/OBO. Jim, Ext. 5018.
- LAWN MOWER** - with bag or mulch, runs well, not pretty, \$45. Joe, Ext. 3783.
- LAWN MOWER** - 21" Troy Built, self prop, rear bagger. excel. cond., ask. \$100; Radial Arm Saw, ask \$80. Frank, 839-6327.
- FAN** - Holmes Air, 2 spds, dual 8", Mod HAWF 2080, fits all windows \$15. Ext. 3217.
- WINDOW FAN** - Holmes Elite Streamline, Model HAWF 3030, 4 speeds incl. sleep setting, fits all windows, \$15. Ext. 3217.

Miscellaneous

- FIG TREES** - up to 4' h, \$10/ea. 744-5867.
- GRACO PACK & PLAY** - great cond., mocha & blue w/teddy bears, \$25. 924-6395.
- PRENATAL HEART LISTENER** - Unused, monitor to hear baby's heartbt in utero. W/2 headsets. \$25 obo. Ext. 3807.
- TICKETS** - 2, Meat Loaf, Madison Square Garden, Fri., July 20, 8 p.m., sect 202 row R seats 9 & 10, \$180/pr. 516-527-4902.

Yard & Garage Sales

- BROOKHAVEN** - 14 Beach St., 6/23 rain or shine, furn., glassware/dishes, books, antiques, craft/sewing items, more. 591-4254.

Free

- BEDROOM** - child's, chest/dwrws w/upper shelves, comb/desk, corner shelf & ch. of drwrs, white, gd. cond. 240-9973.
- BOAT** - 16', O'Day, day sailer, in working order. 286-3679.
- RECORD ALBUMS**, 33 1/3 - sev. hundred from 60's, v. gd. cond. 727- 2346.

Wanted

- .NET DEVELOPERS** - I want to set up Lab-wide forum for .Net developers on site, c/ tact gorden@bnl.gov. Pat, Ext. 5159.
- ADOPT-A-PLATOON ITEMS** - foot powder, Chapstick, Visine, Wet Ones, sun screen, fem. hygiene products, mouth-wash strips, etc. Donation boxes are in Berkner Hall and Bldgs. 120, 400, 490, & 902. Ext. 5483. Thanks much.
- BOOK** - custom thread art by Dale Clemens. Bruce, Ext. 7213.

ROOM - reasonable to rent in a house by others, close to BNL. 344-4034.

Lost & Found

- HONDA KEY** - frnd. nr Chemistry, Ext. 5090.
- LOST** - Samsung cell phone on 6/4, in belt clip case. Ext. 3680.
- LOST** - gray valet key near bldgs. 130, 555 or 373 on 6/12 Ext. 4532.
- VALET KEY** - Gray key lost near bldgs 130, 555 or 373 on 6/12. Ext. 4532.

For Rent

- BELLPORT** - 2 bdrm. apt., all incl., \$1,100/mo. 803-2588.
- CENTER MORICHES** - 1 bdrm., full bath, eik & l/r area, lg. cl., own back yd. area, nr Lab, quiet st., util incl., sm pet ok. \$800/ mo. 878-1178.
- CENTER MORICHES** - 2-bdrm. grd. flr., apt. w/full bath, lr, eik & patio, quiet, 1 block in fr. bay, no smkg/pets, incl. util. avail. 9/1, \$1,250/mo. 909-1801.
- FARMINGVILLE** - v. lg studio apt., fully furn., incl. util. cable/VCR/net, use of backyd., igp, no smkg/pets, pvt. ent/drway. \$950/mo. 732-2474.
- MASTIC BEACH** - room, female preferred, brand new house, cell: 917-251-0345 \$750/mo. Sally, 772-5674.
- MEDFORD** - 1 bdrm, eik, l/r, full tile bath, all util. elec, heat, internet & tv incl., no smkg/pets, Sep. ent. \$850/mo. 758-2653.
- MIDDLE ISLAND** - 4 bdrm., 2 bath, .5 ac yd., a/c, 15 mi. to Lab, .5 mile to lake. Single fam. pref. but can share. util. not incl. \$2,500/mo./neg. Wei, Ext. 3744.
- RIDGE** - a/c, 1 bdrm., approx. 6 mins. to Lab, igp, all utils. incl., \$500/mo./neg. Rao, Ext. 3387.
- ROCKY POINT** - 1 bdrm. house, priv. area, 2 blocks to bch., newly renev., no pets, incl. elec. & wtr., + sec., \$1,100/mo. 744-5282.
- ROCKY POINT** - 1-bdrm apt., kit., l/r, bath, pvt driveway/ent., no smkg/pets, 1 mo. Sec., utils not incl. \$850/mo. 821-3287.
- SHIRLEY** - 1 person rm, full bath, sep. ent., furn, tv, wireless, incl. all, 15 min. to Lab, 5 min. to stores/beach, 1 mo sec., no smkg/pets. \$650/mo. Regis, Ext. 8321.
- SHOREHAM** - 1 bdrm. apt., fully furn., l/r, d/ r, full kit.& bath, a/c, util. incl. no smkg/pets, use of bckyd., pvt. ent/drway. sing. or cple only, 1 mo. sec. \$1,100/mo. 375-7959.
- SHOREHAM** - partial furn. bdrm., share a house w/professional, 7 mi. to BNL, internet & tv incl., no smkg/pets, single \$650/mo. Ext. 3785 or 744-3543.
- SOUND BEACH** - 2 bdrm. cottage, 5 rms., 1.5 baths, pets neg., + 1 mo. sec., util not incl. \$1,400/mo. 374-1512.

For Sale

- HOLBROOK** - 2 bdrm. condo, .5 bath, excel./move-in cond., c/a, fp, attic, wd, near pool, playgrd., low taxes, Sachem dist, 20 mins to Lab \$325,000 Jamie, 766-1492.
- KISSIMMEE, FL** - deeded timeshare at Westgate Villa Resort, 50th wk., 2 bdrm, slps 6, l/r, d/r, w/d, full kit., pool, more. \$6,500/neg. 736-5259.
- MEDFORD** - updated 3 bdrm. condo in Blue Ridge Devel. see www.forsale-byowner.com/20793141. \$315,000, Eileen, Ext. 3995 or 696-4366.
- MIDDLE ISLAND** - 5 bdrm., 3.5 bath, fp, lr, eik, formal dr, laundry, hrdwd. flrs., 2-car gar, igp \$459,000/neg. Elvin Cabrera, 917-848-3071.
- MIDDLE ISLAND, NY** - 5 bdrm., 3.5 bath fp, lr, eik, formal dr, laundry, hrdwd flrs., 2 car gar, igp, \$459,000/neg. Elvin Cabrera, 917-848-3071.
- MIDDLE ISLAND** - Strathmore-on-the-Green, Gated priv. comm., 3 bdrm., 2.5 baths, on the 17th fairway. \$349,000/neg. Michael, Ext. 7941 or 345-0605.
- PATCHOGUE** - updated Victorian, 4 bdrm., eik, dr, 1.5 bath, 2 car gar., all hw. flrs., fp, pocket drs., on dead end, 73 Rose, Village. \$399,000 757-0969 X20.
- SHOREHAM** - 4 br, 2.5 bath Col., lr, dr, den w/fp, lg. kit. w/bkfst area, fin. bsmt. gas ht, hrdwd. flrs., igs, extras, SWR schools. \$569,000/neg. 821-3320.
- SOUTH HAVEN** - single family home, l/r w/fp, eik, 2 bdrm., full bath, gd-size enc. sunroom, round igp w/priv., bkycd., full bsmt., gar. \$475,000. 286-8338.
- YAPHANK** - 3 bdrm., kit. w/dining area, l/r w/fp, full bsmt., 1 full & 2 half baths, inside ent. to gar., 5 min. to Lab. \$319,000 Jane, 921-8497.

Happenings

HEALTH AWARENESS TALK - "Chinese Medicine for Health & Wellness" by Yeming Chen, President, NY College of Trad. Med., Jun 26, LH1, Wang Center of SBU, 6 pm-8:30 p.m. Hai-Dee, Ext. 2062.

On-Site Services

ENTERPRISE RENT-A-CAR - on-site, Bldg. 355, 50 Brookhaven Ave. W/end specials, more. Ext. 4888 or www.enterprise.com.

ON-SITE SERVICE STATION - All vehicle services, NYS inspections, new batteries, tires, timing belts, repairs, etc., done while you are at work. Ext. 4034.

NAYARSONS DINING - at Brookhaven Center, full menu dinners 5-8 p.m.; specials 5-6:30 p.m. 3-course, wine/soda, coffee, \$10.95 or \$9.95 (no take out); Weds. rib-eye steak, veg., Bud. \$11.95, all plus tax.

the Bulletin

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Liz Seubert, editor
John Galvin, reporter
Roger Stoutenburgh, photographer

On the Web, the Bulletin is located at www.bnl.gov/bnlweb/pubaf/bulletin.html. A calendar listing scientific and technical seminars and lectures is found at www.bnl.gov/bnlweb/pubaf/calendar.html.

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